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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO. 5233	
09/880,457		06/12/2001	James Pan	P2871R1		
9157	7590	09/30/2002				
GENENTE	-		EXAMINER			
I DNA WAY SOUTH SAN FRANCISCO, CA 94080				DEBERRY, REGINA M		
				ART UNIT	PAPER NUMBER	
				1647		
				DATE MAILED: 09/30/2002	10	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Appl	ication No.		Applicant(s)						
Office Action Summary			80,457		PAN ET AL.						
			miner		Art Unit						
			na M. DeBerry		1647						
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply										
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status											
1)	Responsive to communication(s) f	iled on <u>01 Septer</u>	<u>mber 0902</u> .								
2a) <u></u> ☐	This action is FINAL.	2b)⊠ This act									
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims											
4)⊠	Claim(s) 1-48 is/are pending in the	application.									
	4a) Of the above claim(s) is/		om considerat	ion.							
	Claim(s) is/are allowed.										
•	6) Claim(s) is/are rejected.										
	7) Claim(s) is/are objected to.										
•	Claim(s) 1-48 are subject to restric	tion and/or electi	on requireme	nt.							
Application Papers											
9) The specification is objected to by the Examiner.											
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.											
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).											
11) 🔲 -	The proposed drawing correction fil				oved by the Exami	ner.					
If approved, corrected drawings are required in reply to this Office action.											
12)	The oath or declaration is objected	to by the Examin	er.								
Priority under 35 U.S.C. §§ 119 and 120											
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).											
a) ☐ All b) ☐ Some * c) ☐ None of:											
	1. Certified copies of the priority documents have been received.										
	2. Certified copies of the priority documents have been received in Application No										
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>											
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).											
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.											
Attachment(s)											
2) Notice	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review mation Disclosure Statement(s) (PTO-1449	(PTO-948) ) Paper No(s)	5) 🔲		ry (PTO-413) Paper I I Patent Application (I						

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## **DETAILED ACTION**

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## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-18, drawn to isolated nucleic acid, vector, host cell and process for producing the polypeptide, classified in class 435, subclass 69.1.
  - II. Claims 19-25 and 30a, drawn to isolated polypeptide, classified in class 530, subclass 300.
  - III. Claims 26-27, drawn to the chimeric polypeptide, classified in class 536, subclass 23.4.
  - IV. Claims 28-29 and 30d, drawn to antibody, classified in class 530, subclass 387.1
  - V. Claim 30b, drawn to agonist to a NS4 polypeptide, class dependent on agonist.
  - VI. Claim 30c, drawn to antagonist to a NS4 polypeptide, class dependent on antagonist.
  - VII. Claims 31, 33-36, drawn to method for screening for binding, classified in class 435, subclass 7.1.
  - VIII. Claims 32, drawn to method for screening for a modulating agent, classified in class 435, subclass 7.8.
  - IX. Claims 37-43, drawn to a method for treating a body weight disorder, classified in class 514, subclass 2.

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 Claims 44-45, drawn to method of reducing triglyceride levels, classified in class 514, subclass 2.

- XI. Claims 46-47, drawn to method of increasing metabolic rate, classified in class 514, subclass 2.
- XII. Claim 48, drawn to transgenic animal, classified in class 800, subclass 8.

Although there are no provisions under the section for "Relationship of Inventions" in M.P.E.P. §806.05 for inventive groups that are directed to different methods, restriction is deemed to be proper because these methods appear to constitute patentably distinct inventions for the following reasons: Groups VII-XI are directed to methods that recite structurally and functionally distinct elements, are not required one for the other, and/or achieve different goals. Invention VII requires screening for binding, which is not required by any of the other groups. Invention VIII requires screening for a modulating agent, which is not required by any of the other groups. Invention IX requires a method for treating a body weight disorder, which is not required by any of the other groups. Invention X requires a method of reducing triglyceride levels. Invention XI, drawn to a method of increasing metabolic rate.

Therefore, a search and examination of all methods in one patent application would result in an undue burden, since the searches for the methods are not co-extensive, the classification is different, and/or the subject matter is divergent.

Inventions II and VII-XI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1)

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the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the isolated polypeptide can be used in processes to make antibodies.

Inventions I/V-XI; II/XII; III/I,V-XII; IV/V-XII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions can be shown that they are not disclosed as capable of use together.

Although there are no provisions under the section for "Relationship of Inventions" in M.P.E.P. §806.06 for inventive groups that are directed to different products, restriction is deemed to be proper because these products constitute patentably distinct inventions for the following reasons: Groups I-IV and XII are directed to products that are distinct both physically and functionally, are not required one for the other, and are therefore patentably distinct. The protein of Group II can be prepared by processes which are materially different from recombinant DNA expression of Group I, such as by chemical synthesis, or by isolation and purification from natural sources. Additionally, the DNA of Group I can be used other than to make the recombinant protein of Group II, or the transgenic animal of Group XII, such in gene therapy or as a probe in nucleic acid hybridization assays. The protein of Group II can be used in materially different methods other than to make the antibody of Group IV, or the chimeric polypeptide of Group III such as in therapeutic or diagnostic methods (e.g., in

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screening). The antibody of Group IV can be used to obtain the protein of Group II or the recombinantly expressed protein of Group I, it can also be used in materially different methods, such as in various diagnostic (e.g., as a probe in immunoassays or immunochromatography), or therapeutic methods.

Applicant is required to elected one polynucleotide SEQ ID NO:, one polypeptide SEQ ID NO: and one ATCC Deposit No. Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. Amino acid sequences of different polypeptides are also structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq. Accordingly, only one (1) independent and distinct nucleotide/polypeptide sequence will be examined in a single application without restriction.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, separate search requirements, and/or recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina M. DeBerry whose telephone number is (703) 305-6915. The examiner can normally be reached on Mondays-Fridays 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (703) 308-4623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7939 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

RMD

September 23, 2002

ELIZABETH KEMMERER
PRIMARY EXAMINER

Elyabet C. Kenn